

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Reissue Application of

Tsutomu Hashizume, et al.

Reissue Application of U.S. Patent  
No. 6,089,701 issued on July 18, 2000

Filed: Herewith

For: INK JET RECORDING HEAD HAVING REDUCED STRESS CONCENTRATION  
NEAR THE BOUNDARIES OF PRESSURE GENERATING CHAMBERS

**REISSUE DECLARATION UNDER 37 C.F.R. § 1.175**

We, Tsutomu HASHIZUME, Tetsushi TAKAHASHI, and Akira MATSUZAWA, all of Japan, do hereby declare and state as follows:

Our residence, post office address and citizenship are as stated below next to our names.

We believe that we are the original, first and joint inventors of the invention "INK JET RECORDING HEAD HAVING REDUCED STRESS CONCENTRATION NEAR THE BOUNDARIES OF PRESSURE GENERATING CHAMBERS" which is described and claimed in the above-identified U.S. Patent No. 6,089,701 issued on July 18, 2000 and assigned to SEIKO EPSON CORPORATION, the specification of which is submitted with this application for reissue; and that we have reviewed and understand the contents of the specification, including the new claims, as added in this application for reissue.

In compliance with 37 C.F.R. § 1.175(a)(7) and 1.63(b)(3), we hereby acknowledge our duty to disclose information of which we are aware which is material to patentability as defined in 37 C.F.R. § 1.56.

REISSUE DECLARATION UNDER 37 C.F.R. § 1.175  
REISSUE APPLICATION OF U.S. PATENT NO. 6,089,701

The priority is claimed from:

**Japanese Patent Application**

**Filing Date**

Hei. 8-88469

April 10, 1996

Hei. 8-344568

December 9, 1996

Hei. 9-083245

March 17, 1997

In compliance with 37 C.F.R. §§ 1.175(a), we hereby declare and state that the above-identified U.S. Patent No. 6,089,701 is believed to be at least partly inoperative for the reason that we claimed less than we had the right to claim in the patent.

The purpose of seeking a reissue patent is to correct the insufficiency in the patented claims by presenting new claims which are commensurate with the true scope of our invention.

Pursuant to 37 C.F.R. § 1.175(a)(1), we state as follows at least one error in the patent, which is relied on as a basis for this reissue. The patented claims 1 - 12 are apparatus claims directed to an ink jet recording head. The specification also describes process steps for forming the inventive ink jet recording head, but there are no claims directed to the method. Therefore, new claims directed to the method of forming an ink jet recording head in accordance with the invention, are hereby added by this reissue to correct an error in claiming less than we had a right to claim.

Pursuant to 37 C.F.R. § 1.175(a)(2), we state that all errors being corrected in the reissue application up to the time of filing this declaration arose without any deceptive intention.

We hereby appoint John H. Mion, Reg. No. 18,879; Thomas J. Macpeak, Reg. No. 19,292; Robert J. Seas, Jr., Reg. No. 21,092; Darryl Mexic, Reg. No. 23,063; Robert V. Sloan,

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Reg. No. 22,775; Peter D. Olexy, Reg. No. 24,513; J. Frank Osha, Reg. No. 24,625; Waddell A. Biggart, Reg. No. 24,861; Louis Gubinsky, Reg. No. 24,835; Neil B. Siegel, Reg. No. 25,200; David J. Cushing, Reg. No. 28,703; John R. Inge, Reg. No. 26,916; Joseph J. Ruch, Jr., Reg. No. 26,577; Sheldon I. Landsman, Reg. No. 25,430; Richard C. Turner, Reg. No. 29,710; Howard L. Bernstein, Reg. No. 25,665; Alan J. Kasper, Reg. No. 25,426; Kenneth J. Burchfiel, Reg. No. 31,333; Gordon Kit, Reg. No. 30,764; Susan J. Mack, Reg. No. 30,951; Frank L. Bernstein, Reg. No. 31,484; Mark Boland, Reg. No. 32,197; William H. Mandir, Reg. No. 32,156; Brian W. Hannon, Reg. No. 32,778; Abraham J. Rosner, Reg. No. 33,276; Bruce E. Kramer, Reg. No. 33,725; Paul F. Neils, Reg. No. 33,102; Brett S. Sylvester, Reg. No. 32,765; Robert M. Masters, Reg. No. 35,603, George F. Lehnigk, Reg. No. 36,359, John T. Callahan, Reg. No. 32,607 and Steven M. Gruskin, Reg. No. 36,818, my attorneys to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, and request that all correspondence about the application be addressed to **SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC**, 2100 Pennsylvania Avenue, N.W., Washington, D.C. 20037-3213.

We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

REISSUE DECLARATION UNDER 37 C.F.R. § 1.175  
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REISSUE DECLARATION UNDER 37 C.F.R. § 1.175  
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Date Nov 20, 2000

# Assignment

Whereas, I/We, Tsutomu Hashizume, Tetsushi Takahashi and ~~xxx~~  
Akira Matsuzawa of Nagano, Japan

hereinafter called assignor(s), have invented certain improvements in

INK JET RECORDING HEAD

and executed an application for Letters Patent of the United States of America therefor on  
May 26, 1997; and

Whereas, Seiko Epson Corporation of 4-1,  
Nishi-Shinjuku 2-chome, Shinjuku-ku,  
Tokyo, Japan  
(assignee), desires to acquire the entire right, title, and interest in the application and invention, and to  
any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its  
successors and assigns, the entire right, title and interest in the application and the invention disclosed  
therein for the United States of America, including the right to claim priority under 35 U.S.C. §119, and  
I/we request the Commissioner of Patents to issue any Letters Patent granted upon the invention set forth  
in the application to the assignee, its successors and assigns; and I/we will execute without further  
consideration all papers deemed necessary by the assignee in connection with the United States application  
when called upon to do so by the assignee.

I/We hereby authorize and request my attorneys SUGHRUE, MION, ZINN, MACPEAK & SEAS of  
2100 Pennsylvania Avenue, N.W., Washington, D.C. 20037-3202 to insert here in parentheses (Application  
number 08/835,748, filed April 10, 1997) the filing date and application  
number of said application when known.

Date: 05/26/1997 s/ Tsutomu Hashizume

Date: 05/26/1997 s/ Tetsushi Takahashi

Date: 05/26/1997 s/ Akira Matsuzawa

Date: s/ \_\_\_\_\_

Date: s/ \_\_\_\_\_

(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)